

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 63278001
PUBLICATION DATE : 15-11-88

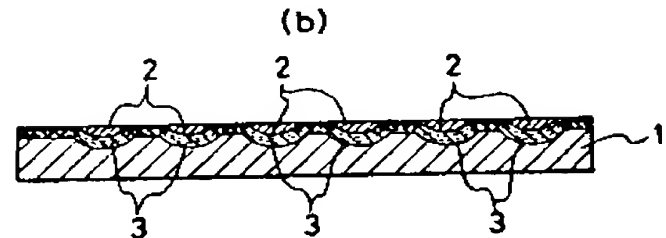
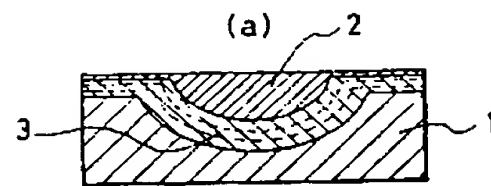
APPLICATION DATE : 13-01-87
APPLICATION NUMBER : 62005699

APPLICANT : NIPPON SHEET GLASS CO LTD;

INVENTOR : KASHIWAGI HISAYUKI;

INT.CL. : G02B 3/00

TITLE : PLATE LENS



ABSTRACT : **PURPOSE:** To combine a plate lens with another lens to use it most suitably and to facilitate various optical treatments by burying small lens parts, which consist of semispherical lens areas having a refractive index different from that of a synthetic resin plane plate and semispherical lens areas having a refractive index gradient, in the transparent synthetic resin plane plate having a uniform refractive index as one body.

CONSTITUTION: Small lenses each of which consists of one or plural semispherical refractive index homogeneous lens area 2 having a refractive index different from that of a substrate 1 and a lens area 3 following this area 2 and having a refractive index gradient are buried as one body in the surface of the transparent substrate formed with a synthetic resin having a uniform refractive index. Surface layers of surfaces where small lenses are formed on the plate lens have almost the same refractive index as semispherical areas 2. That is, these surface layers are uniformly constituted of a polymer having the same constitution as semispherical areas 2. Thus, this plate lens is convenient for the combinational use with another lens because the lens surface of this plate lens is flat, and the lens is easily subjected to various optical treatments.

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